

ADDITIONS TO THE FLORA OF THE BLACK HILLS OF SOUTH DAKOTA

BY STEPHEN SARGENT VISHER

During the first half of August, 1908, a collection of about three hundred species of the ferns and flowering plants of the northern Black Hills was made for the State Museum. Upon reference to Saunders' Ferns and Flowering Plants of South Dakota¹ and to Rydberg's Flora of the Black Hills², it is believed that some eight species are new to the state; some eight additional new to the Hills, though known from the eastern part of the state; five are recorded from the northern part of the Hills for the first time, though they were collected near Custer in the southern part; and five more rare species are mentioned from new localities in the hills. In the list the species believed to be new to the state are indicated by an asterisk, those known from other parts of the state are followed by (eastern) if from the eastern part, or by (Custer), (Lead), etc., if from other localities in the Hills.

The collection was identified with the kind assistance of Dr. J. M. Greenman at the Field Museum of Natural History, Chicago.

Woodsia scopulina D. C. Eaton. Rocky Mountain Woodsia.

This fern was found to be quite abundant in protected niches in rocks near Roubaix. (Rare in Black Hills.)

Pteris aquilina L. Bracken fern.

Locally abundant in woods on Custer's Peak. (Custer.)

Eleocharis intermedia (Muhl.) Schultes. Matted spike-rush.

Common on moist ground near Rapid City. (Eastern.)

* *Scirpus Torreyi* Olney. Torrey's bullrush.

Common in marsh near Roubiax.

* *Juncus balticus* Willd. Baltic rush.

Rare, Rapid City.

* *Juncus acuminatus* Michx. Rush.

Rare, in marsh, Rapid City.

¹ D. A. Saunders, Bulletin 64, U. S. Experiment Station, South Dakota.

² P. A. Rydberg, Contrib. U. S. Nat. Herb. 3: 463-536. *pl.* 17-20. 1896.

Juncus xiphioides montanus Engelm.

Found in Spearfish Canyon. (Custer.)

* *Salix Scoulerana* Barrett. Scouler willow.

Frequent, forming trees, in deep woods, well up on Custer's Peak.

* *Alsine longipes laeta* Watson.

On hills south of Rapid City.

Sanguinaria canadensis L. Bloodroot.

Abundant in the shady gulches near Whitewood. (North-eastern.)

Melilotus alba Desr. White clover.

M. officinalis (L.) Lam. Sweet clover.

Both of these clovers are now extensively naturalized near Rapid. (Eastern.)

Hedysarum americanum (Michx.) Britton. Hedysarum.

Also near Roubaix. (Rockford.)

* *Ceanothus ovatus* Desf. Oval-leaved red-root.

Abundant in woods near Whitewood. Although this and the next are recorded by Rydberg, they are not included in the catalogue.

Vitis vulpina L. Riverside grape.

Common near Roubaix. (Eastern.)

Malva rotundifolia L. Cheese mallow.

Naturalized near Rapid City. (Eastern.)

Viola arenaria DC. Sand violet.

Abundant on rocks near Bucks and in Spearfish Canyon. (Rapid.)

Pastinaca sativa L. Wild parsnip.

Escaped in Box-elder Canyon. (Rapid.)

Pyrola rotundifolia L. Round-leaved wintergreen.

In wooded ravines near Whitewood. (Lead.)

Pterospora andromedea Nutt. Pine drops.

Abundant in woods on Custer's Peak and in Spearfish Canyon. (Rapid.)

Dodecatheon Meadia pauciflorum Durand. Shooting star.

Rare, on hills. Rapid City. (Custer.)

Stachys aspera Michx. Rough hedge nettle.

On moist ground in Box-elder Canyon. (Custer.)

Mimulus luteus L. Yellow monkey-flower.

Abundant on a springy slope in Elk Canyon. (Lead.)

Symphoricarpos occidentalis Hook. Wolfberry.

Frequent along Box-elder Creek, on plain near Underwood. (Eastern.)

* *Lonicera utahensis* Watson. Low honeysuckle.

Rare, on deep cool woods in Elk Canyon near Runkle.

Sicyos angulatus L. Burr cucumber.

In thickets along Rapid Creek near Rapid. (Eastern.)

Erigeron annuus (L.) Pers. Sweet scabious.

Common in "Red Valley" near Blackhawk. (Eastern.)

* *Arnica pumila* Rydberg.

Fairly common on dry slopes west of Rapid City and near Mystic.

CARNEGIE LABORATORY, TUCSON, ARIZONA

THE 1909 SYMPOSIUM AT STAMFORD, NEW YORK

From the point of view of the specimen hunter, the symposium held this year at Stamford, Delaware County, July 3-10, will not be considered a successful event as the number of "rare finds" readily accessible was scanty. From the view-point of those interested in ecologic and phytogeographical problems the week spent in the mountains will be remembered with pleasure.

Generally speaking the area covered during the week is the northwestern outpost of that part of the Catskills which lies within the range prescribed by the club's preliminary catalog of 1888. The town itself is about 1,800 feet above sea-level, and it is nestled in a natural basin. The depression is fringed with mountains, the highest of which is Mt. Utsayantha, credited with an elevation of 3,365 feet. Within three miles of the town the headwaters of the western branch of the Delaware river take their origin, and as it runs through the town the stream is scarcely more than a tiny brook. In this same height of land, but flowing in the opposite direction, the headwaters of Schoharie creek originate. This ultimately flows into the Hudson, via the Mohawk.

The club herbarium contains practically no material from Del-